

(3) The systematic treatment of the order Phytolaccaceæ, by Hans Walter, differs but slightly from that adopted by Bentham and Hooker in the "Genera Plantarum." The three tribes into which the order is there divided—Rivineæ, Euphytolacæ and Gyrostemoneæ—are here maintained with almost identical limitations. Bentham's genus *Stegnosperma*, classed in the "Genera Plantarum" as a *genus anomalum*, is regarded by Walter as the type of a distinct subfamily, the order being divided into two subfamilies—Phytolaccoideæ and Stegnospermoideæ, the latter containing the single genus *Stegnosperma*. There has been considerable difference of opinion as to the limitation of this order, especially in relation to the Ficoideæ, certain genera having been included by different authors in each family. The criterion of one or more than one ovule in the carpel is not a universal one, and the author of the present monograph is convinced that the structure of the inflorescence forms a better means of distinction between the two families. A good proportion of new species is described in the course of the work; thus, of twenty-six species of *Phytolacca*, seven are here described for the first time.

A. B. R.

THE HAND-LIST OF BIRDS.

A Hand-list of the Genera and Species of Birds. (Nomenclator Avium tum Fossilium tum Viventium.) By R. Bowdler Sharpe. Vol. v. Pp. xx+694. (London: British Museum, Natural History, 1909.) Price 20s.

DR. SHARPE may be assured not only of our own congratulations, but of those of ornithologists in general, on the completion of his heavy task and the issue of the final volume of a work the first of which appeared so long ago as 1899. No one who has not tried it can have any conception of the enormous amount of labour involved in a task of this nature, and when we add that the author estimates the total number of distinguishable forms of birds as close upon 19,000, it will be unnecessary further to emphasise the magnitude of the work just brought to a close.

The value of these five volumes to the working ornithologist—whether we altogether agree or not with the author's view as to the limitations of genera, the multiplication of family groups, and the non-recognition of local races—can scarcely be overestimated, although it must always be borne in mind that the work is meant to be used in connection with the British Museum Catalogue of Birds, to the volumes of which references are given under the headings of the various species. In the case of many species, one or two synonyms are given; and almost the only improvement that we could suggest is that in the case of genera and species where well known names have been changed it would have been better if a larger number of synonyms had been quoted, which could have been done without any increase in the bulk of the volume, as there is a large amount of blank paper.

We are glad to see that in the introduction Dr. Sharpe takes the opportunity of making certain

amendments in the arrangement of the "orders" of birds, such emendations being, in our opinion, for the most part a decided improvement on his previous scheme. The most important item in this remodelling is the abolition of *Carinatae* and *Ratitae* as the two main divisions of existing birds, and the inclusion of the tinamus with the ostriches to form one group distinguished by the structure of the palate from a second group containing all other existing birds. When, however, the author proposes to regard these two groups (*Neognathae* and *Palæognathae*) as equivalent in rank to the one (*Saururæ*) containing *Archæopteryx*, we beg to dissent from his views.

In our notices of at least one of the previous volumes of the "Hand-list" we have directed attention to the want of uniformity in the spelling of geographical names. Unfortunately, the author has not availed himself of the hint, with the result that the "pleasing" variety of orthography is more pronounced in the present issue than in any of its predecessors. We have, for instance, Malay Peninsula and Malayan Peninsula on the same page (62), and Malacca in another place; *Dentrecasteaux* (p. 63) and *D'Entrecasteaux* (p. 69); *Niasa-land* (p. 47), *Nyasa-land* (p. 35), and *Nyasa Land* (p. 474); *Cashmere* (p. 167) and *Kashmir* (p. 173); *Szechuen* (p. 233) and *Szechuan* (p. 268); *Somali-land* (p. 184) and *Somali Land* (p. 465); *Damara-land* (p. 185) and *Damara Land* (p. 475); and *Island of St. Thomas* in one place (p. 463) and *S. Thomè Isl.* in another (p. 635). We may also note (p. 175) *Lipikia* for *Likipia*. In our own experience, the only way to avoid discrepancies of the above nature is to enter every name as it occurs in a list, and to check all subsequent occurrences. With the exception of these discrepancies, which are creditable neither to the author nor to the museum, we have little except commendation to bestow on the volume before us.

For reference purposes, the whole work suffers, however, from the circumstance that the page-headings on both sides are taken up by useless repetitions of the general title, whereas the heading on one side should have carried the family-names. In the case of large families, to find the family-position of a genus it is necessary, after ascertaining the page on which it occurs from the index, to turn back until the family-name is reached, or to refer to the table of contents. In this respect the work compares badly with the "Catalogue of Birds' Eggs." A general index to the five volumes would also have been very useful.

R. L.

SOCIAL EVOLUTION.

Darwinism and Modern Socialism. By F. W. Headley. Pp. xv+342. (London: Methuen and Co., 1909.) Price 5s. net.

MR. HEADLEY has given the general reader a comprehensive and well-stated case against Socialism. He brings together the best of the known economic arguments, and bases the whole on biological principles.

The text is that "it is very difficult for a follower of Darwin and Weismann to be a Socialist." In a

survey of early forms of mutual dependence, such as the village community in England and India and the Russian *mir*, he shows that the Socialism, so-called, of the primitive and pre-industrial epochs did not conflict with Darwinian principles. The new Socialism, however, aims at stopping "the struggle for existence" and the elimination of "the unfit."

Much stress is laid all through on the institution of the family, which is a permanent possibility of individualism, and the eternal matrix of capitalism.

The author's view is clear; he avoids irrelevancy, and has the faculty of going straight for the point and of illustrating it by well-chosen examples. Thus he shows that "natural selection" acts only at crises, such as disease or war. In an excellent analysis of the work of our Post Office he emphasises the only relevant points, namely, that all Government departments are wasteful, and that success is really the result of "private" enterprise and of "private" criticism. The same truths apply to "the common sense of municipal trading," a curious hybrid between Socialism and Capitalism. The proofs of all this are well put.

"To abolish private industry would be to kill the goose that lays the golden eggs"; and this is what the Socialist proposes to do. The two chapters which demonstrate this are excellent, and the author has humour as well as insight.

The main defect of our economic system (to which is ascribed the vigour of theoretical Socialism) is excessive accumulation of capital. The main duty of the State is to act as umpire in the competitive struggle. It must not itself produce.

As to minor points calling for criticism, the explanation of the custom of a mock "capture" of the bride as a survival of "bride-lifting" from another tribe is obsolete. Such ceremonies have a psychological origin. The bride is "captured" from her sex and herself.

The frequent objection of Socialists to Christianity is hardly due to a desire to abolish the family. It is rather due to its claim of "authority" and its tendency to Erastianism.

Yet about this book, as about previous applications of "natural selection" to human society, there is something unsatisfactory. False analogy and ambiguity of terms may result, if we forget the fact that in a civilised community survival largely depends on factors which do not exist in "nature."

This doubt may be applied by the reader to chapter ix., the most crucial and the least convincing. It is on "natural selection among civilised peoples."

There is something wrong about the identification of the struggle for existence in the natural world with our competitive system. Transfer a typical unemployed to a state of nature and he would survive. The conditions of the two cases are so different.

Then what is survival-merit now? Mr. Headley speaks of steadiness, honesty, and thrift. An impartial view must add unscrupulousness, low cunning, incapacity for generosity, mercy, and the nobler ideals, for art and culture, and—for conscientious work. Moral values are, of course, a matter of time and place, but there is such a thing as dehumanisation.

Add physical survival-merit, and consider if we are not evolving a type which has been described as "a race of men, small, ill-formed, disease-stricken, hard to kill."

He speaks of our lowest class as living in a "primitive" fashion. By its "best blood" the next stratum is reinvigorated. Here is ambiguity of terms.

The selection going on under our competitive system is not necessarily producing "the splendid pattern" of which Mr. Headley and the poet have dreamt.

A. E. CRAWLEY.

A HERO OF MEDICINE.

Semmelweis: his Life and Doctrine. By Sir William J. Sinclair. Pp. x+369. (Manchester: University Press, 1909.) Price 7s. 6d. net.

"IN the history of midwifery there is a dark page, and it is headed Semmelweis." Semmelweis was a prophet, and he was misunderstood by the people he came to save. The services he rendered mankind cannot be overestimated. His discovery was epoch-making. He established the cause of puerperal fever, and threw light on all septic conditions. Before his time the cause of wound infection was not understood. Semmelweis proved that puerperal fever was analogous to wound fever, both being due to contamination from putrid organic matter. The cause of puerperal fever having been established, Semmelweis worked at its prophylaxis. He insisted on the cleanliness of the patient and her surroundings, and sketched the principles which underlie the antiseptic and aseptic treatment of wounds, and so laid the foundation for modern surgery, gynaecology, and obstetrics. During his life Semmelweis was misunderstood and misrepresented; he met with opposition, jealousy, and hatred from his own profession; he was degraded and belittled; yet, to-day, his conclusions are universally accepted and form the foundation of surgical thought.

There should be a wide public, lay as well as medical, for a book as full of historical, scientific and human interest as this "Life of Semmelweis." It is a just tribute to the memory of a very great man. The only criticism which might be made is that the last hundred pages, dealing with discredited contemporary opinions, might have been curtailed. The early chapters give a vivid account of the conditions under which Semmelweis worked as student and assistant in the great lying-in hospital of Vienna. His attention was soon arrested and his heart wrung by the appalling death-rate among the patients, and he resolved to find the cause of the scourge which decimated the hospital. Broadly, the facts were these: the mortality among women delivered in the hospital, always higher than that among those confined at home, suddenly rose to an unprecedented figure in the year 1822, when the anatomical basis of instruction was introduced into the curriculum of the medical students. The students used to pass from the dissecting-room to the labour wards, and from this time the hospital mortality rose until at one period nearly half the patients died. The lying-in